

ROTATING AND PIVOTING MAGNET FOR MAGNETIC NAVIGATION

ABSTRACT OF THE DISCLOSURE

A magnet assembly comprising a magnet mounted for pivoting about a first axis spaced from the magnet, and rotating about a second axis that is perpendicular to and intersects with the first axis. The magnet comprising a plurality of segments each with a magnetization direction such that through a combination of pivoting and rotating the magnet projects a magnetic field in any direction at an operating point spaced from the front of the assembly. The segmented construction with segments of different magnetization directions allows small changes in the orientation of the magnet to substantially change the magnet field direction at a system operating point.